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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,578	05/15/2006	Marie-Claire Janailhac	JANAILHAC1	6899

1444 7590 01/08/2007  
BROWDY AND NEIMARK, P.L.L.C.  
624 NINTH STREET, NW  
SUITE 300  
WASHINGTON, DC 20001-5303

EXAMINER
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MI, QIUWEN

ART UNIT	PAPER NUMBER
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1655

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/08/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/542,578	<b>Applicant(s)</b> JANAILHAC ET AL.	
	<b>Examiner</b> Qiuwen Mi	<b>Art Unit</b> 1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 and 8-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7 is/are rejected.
- 7) ☒ Claim(s) 1-3 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Election/Restrictions**

Applicant's election without traverse of claims 1-3, and 7-12 in the reply filed on 11/24/2006 is acknowledged. Applicant also elected species recited in claim 7.

Claims 4-6, and 8-15 are withdrawn from further consideration since they are drawn to non-elected claims.

### **Specification Objections**

The specification is objected to because of the following informalities:

The use of the trademarks such as "Sequestrene®NA4/Celon®E/Trilon®B, Nipagin®M/methyl-POB, and Carbopol®940" has been noted in this application. They and any other trademarks should be capitalized wherever they appear in the specification and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Appropriate correction is required.

### **Claim Objections**

Claims 1-3 and 7 are objected to because of the following informalities:

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The use of the trademarks such as "Sequestrene®NA4/Celon®E/Trilon®B, Nipagin®M/methyl-POB, and Carbopol®940" has been noted in this application. They and any other trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Appropriate correction is required.

#### **Claim Rejections –35 USC § 112, 1<sup>st</sup>**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Chemical names of the components that are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Full generic chemical names of the reagents such as Sequestrene®NA4/Celon®E/Trilon®B, Nipagin®M/methyl-POB, and Carbopol®940 are not included in the claims or specification, therefore one of the ordinary skill in the art will not be able to carry out the invention.

### **Claim Rejections –35 USC § 112, 2<sup>nd</sup>**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language in claims 1-3, and 7 contains the plant name “*Aphanizomenon flos-aquae flos-aquae*” which is incorrect and confusing, the correct name should be “*Aphanizomenon flos-aquae var. flos-aquae*” [see Li (Hydrobiologia 438: 99-105, 2000, page 102, Table 1)]. Correction is required.

The language in claim 7 contains trademarks such as Sequestrene®NA4/Celon®E/Trilon®B, Nipagin®M/methyl-POB, and Carbopol®940 which are not searchable since it is not clear what they are. Applicant is required to provide full generic chemical names of the reagents that are used in the claims since such trademarks do not tell one of ordinary skills in the art exactly what is in the compounds and such trademarks can change the compositions at any time..

### **Claim Rejections –35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li (Hydrobiologia 438: 99-105, 2000) in view of Bryan (US 6,416, 960).

Li teaches the taxonomic of cyanobacteria genus *Aphanizomenon* and species *Aphanizomenon flos-aquae* var. *flos-aquae*. Li indicates that *Aphanizomenon flos-aquae* var. *flos-aquae* in fish pound (as aqueous solution) are used as a health food supplement by several hundred thousand consumers in Northern America (see entire document including, e.g., page 102, Table 1; page 104, right column, second paragraph).

Li does not teach that *Aphanizomenon flos-aquae* var. *flos-aquae* used topically or existing in a control released form.

Bryan teaches a protein derived from cyanobacteria in control-released formulas could be used orally or topically (see the entire document, e.g., column 33, lines 60-65; column 49, lines 5-10 and 29-30; column 50, lines 37-41).

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to combine the inventions of Li and Bryan since Bryan teaches that local administration of the conjugates derived from cyanobacteria is preferred as tumors and vascular proliferative disorders will typically be visualized by the modes of administration, and certain toxic and undesirable side effects are more tolerated. Also, Bryan points out that control

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released formulations are particularly useful for application to the eye for ophthalmic indications following or during surgery in which only a single administration is possible (see the entire document, e.g., column 49, lines 27-43; column 50, lines 37 to 48). Since the invention in Bryan yielded beneficial results in the detection and visualization of neoplastic tissues, one of ordinary skill in the art would have been motivated to make the modifications. The result-effective adjustment in conventional working parameters (e.g., determining an appropriate amount of the components within the composition) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Thus, the invention as a whole is *prima facie* obvious over the references, especially in the absence of evidence to the contrary.

Claim 7 is free of the prior art.

### **Conclusion**

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qiuwen Mi whose telephone number is 571-272-5984. The examiner can normally be reached on 8 to 5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry Mckelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'M. Meller', with a long horizontal flourish extending to the right.

**MICHAEL MELLER**  
**PRIMARY EXAMINER**